

WHAT IS CLAIMED IS:

1. A method of forming a composition comprising adding at least one first compound that is at least one of an alkali metal salt, an ammonium salt, an alkali metal hydroxide, or an ammonium hydroxide and at least one second compound that is at least one of a Group IIA salt, a Group IIIA salt, a Group IIIB salt, a copper salt, a zinc salt, a cadmium salt, a manganese salt, an iron salt, a cobalt salt, or a nickel salt to a latex.
2. The method of claim 1 further comprising drying the composition.
3. The method of claim 1, wherein the at least one first compound is added before the at least one second compound.
4. The method of claim 1, wherein the at least one second compound is added before the at least one first compound.
5. The method of claim 1, wherein the at least one first compound is added to the latex in an amount from greater than 0 to about 4 parts by weight parts by weight of the composition.
6. The method of claim 1, wherein the at least one second compound is added to the latex in an amount from greater than 0 to about 2 parts by weight of the composition.
7. The method of claim 1, wherein the salts of the at least one first compound are selected from the group consisting of sulfates, carbonates, silicates, phosphates, phosphites, borates, fluorides, sulfites, oxalates, citrates, and combinations thereof.
8. The method of claim 1, wherein the alkali metal of the at least one first compound is at least one of sodium or potassium.
9. The method of claim 1, wherein the at least one first compound is selected from the group consisting of sodium hydroxide (NaOH), sodium sulfate (Na<sub>2</sub>SO<sub>4</sub>), sodium bisulfate (NaHSO<sub>4</sub>), sodium carbonate (Na<sub>2</sub>CO<sub>3</sub>), sodium bicarbonate (NaHCO<sub>3</sub>), sodium metasilicate (Na<sub>2</sub>SiO<sub>3</sub>), sodium disilicate (Na<sub>2</sub>Si<sub>2</sub>O<sub>5</sub>), sodium orthosilicate (Na<sub>4</sub>SiO<sub>4</sub>), sodium orthophosphate (Na<sub>3</sub>PO<sub>4</sub>), disodium hydrogen phosphate (Na<sub>2</sub>HPO<sub>4</sub>), sodium dihydrogen phosphate (NaH<sub>2</sub>PO<sub>4</sub>), hexasodium metaphosphate ((NaPO<sub>3</sub>)<sub>6</sub>), trisodium

metaphosphate ( $(\text{NaPO}_3)_3$ ), sodium triphosphate ( $\text{Na}_5\text{P}_3\text{O}_{10}$ ), sodium hypophosphite ( $\text{NaH}_2\text{PO}_2$ ), sodium dihydrogen orthophosphite ( $\text{NaH}_2\text{PO}_3$ ), sodium metaborate ( $\text{NaBO}_2$ ), sodium sulfite ( $\text{Na}_2\text{SO}_3$ ), sodium citrate ( $\text{Na}_3\text{C}_6\text{H}_5\text{O}_7$ ), potassium hydroxide ( $\text{KOH}$ ), potassium sulfate ( $\text{K}_2\text{SO}_4$ ), potassium bisulfate ( $\text{KHSO}_4$ ), potassium carbonate ( $\text{K}_2\text{CO}_3$ ), potassium bicarbonate ( $\text{KHCO}_3$ ), potassium sodium carbonate ( $\text{KNaCO}_2$ ), potassium metasilicate ( $\text{K}_2\text{SiO}_3$ ), potassium tetrasilicate ( $\text{K}_2\text{Si}_4\text{O}_9$ ), potassium orthophosphate ( $\text{K}_3\text{PO}_4$ ), dipotassium hydrogen phosphate ( $\text{K}_2\text{HPO}_4$ ), potassium dihydrogen phosphate ( $\text{KH}_2\text{PO}_4$ ), hexapotassium metaphosphate ( $(\text{KPO}_3)_6$ ), tetrapotassium metaphosphate ( $(\text{KPO}_3)_4$ ), potassium pyrophosphate ( $\text{K}_4\text{P}_2\text{O}_7$ ), potassium subphosphate ( $\text{K}_2\text{PO}_3$ ), potassium hypophosphite ( $\text{KH}_2\text{PO}_2$ ), potassium dihydrogen orthophosphite ( $\text{KH}_2\text{PO}_3$ ), potassium metaborate ( $\text{KBO}_2$ ), potassium tetraborate ( $\text{K}_2\text{B}_4\text{O}_7$ ), potassium fluoride ( $\text{KF}$ ), potassium sulfite ( $\text{K}_2\text{SO}_3$ ), potassium hydrogen sulfite ( $\text{KHSO}_3$ ), potassium citrate ( $\text{K}_3\text{C}_6\text{H}_5\text{O}_7$ ), monobasic potassium citrate ( $\text{KH}_2\text{C}_6\text{H}_5\text{O}_7$ ), ammonium hydroxide ( $\text{NH}_4\text{OH}$ ), ammonium sulfate ( $(\text{NH}_4)_2\text{SO}_4$ ), ammonium bisulfate ( $\text{NH}_4\text{HSO}_4$ ), ammonium carbonate ( $(\text{NH}_4)_2\text{CO}_3$ ), ammonium bicarbonate ( $\text{NH}_4\text{HCO}_3$ ), ammonium orthophosphate ( $(\text{NH}_4)_3\text{PO}_4$ ), diammonium hydrogen phosphate ( $(\text{NH}_4)_2\text{HPO}_4$ ), ammonium dihydrogen phosphate ( $\text{NH}_4\text{H}_2\text{PO}_4$ ), ammonium sodium phosphate ( $\text{NaNH}_4\text{HPO}_4$ ), ammonium hypophosphite ( $\text{NH}_4\text{H}_2\text{PO}_2$ ), ammonium dihydrogen orthophosphite ( $\text{NH}_4\text{H}_2\text{PO}_3$ ), ammonium fluoride ( $\text{NH}_4\text{F}$ ), ammonium sulfite ( $(\text{NH}_4)_2\text{SO}_3$ ), ammonium bisulfite ( $\text{NH}_4\text{HSO}_3$ ), ammonium binoxalate ( $\text{NH}_4\text{HC}_2\text{O}_4$ ), diammonium citrate ( $(\text{NH}_4)_2\text{HC}_6\text{H}_5\text{O}_7$ ), triammonium citrate ( $(\text{NH}_4)_3\text{C}_6\text{H}_5\text{O}_7$ ), and combinations thereof.

10. The method of claim 1, wherein the salts of the at least one second compound are selected from the group consisting of chlorides, sulfates, nitrates, and combinations thereof.
11. The method of claim 1, wherein the at least one second compound is selected from the group consisting of calcium chloride ( $\text{CaCl}_2$ ), calcium nitrate ( $\text{Ca}(\text{NO}_3)_2$ ), magnesium chloride ( $\text{MgCl}_2$ ), magnesium nitrate ( $\text{Mg}(\text{NO}_3)_2$ ), magnesium sulfate ( $\text{MgSO}_4$ ), aluminum chloride ( $\text{AlCl}_3$ ), aluminum nitrate ( $\text{Al}(\text{NO}_3)_3$ ), aluminum sulfate ( $\text{Al}_2(\text{SO}_4)_3$ ), beryllium chloride ( $\text{BeCl}_2$ ), beryllium nitrate ( $\text{Be}(\text{NO}_3)_2$ ), beryllium sulfate ( $\text{BeSO}_4$ ), copper (II) chloride ( $\text{CuCl}_2$ ), copper (II) nitrate ( $\text{Cu}(\text{NO}_3)_2$ ), copper (II) sulfate ( $\text{CuSO}_4$ ),

strontium chloride ( $\text{SrCl}_2$ ), strontium nitrate ( $\text{Sr}(\text{NO}_3)_2$ ), barium chloride ( $\text{BaCl}_2$ ), barium nitrate ( $\text{Ba}(\text{NO}_3)_2$ ), zinc chloride ( $\text{ZnCl}_2$ ), zinc nitrate ( $\text{Zn}(\text{NO}_3)_2$ ), zinc sulfate ( $\text{ZnSO}_4$ ), cadmium chloride ( $\text{CdCl}_2$ ), cadmium nitrate ( $\text{Cd}(\text{NO}_3)_2$ ), cadmium sulfate ( $\text{CdSO}_4$ ), scandium chloride ( $\text{ScCl}_3$ ), scandium nitrate ( $\text{Sc}(\text{NO}_3)_3$ ), scandium sulfate ( $\text{Sc}_2(\text{SO}_4)_3$ ), gallium chloride ( $\text{GaCl}_3$ ), gallium nitrate ( $\text{Ga}(\text{NO}_3)_3$ ), gallium sulfate ( $\text{Ga}_2(\text{SO}_4)_3$ ), indium chloride ( $\text{InCl}_3$ ), indium nitrate ( $\text{In}(\text{NO}_3)_3$ ), indium sulfate ( $\text{In}_2(\text{SO}_4)_3$ ), lanthanum chloride ( $\text{LaCl}_3$ ), lanthanum nitrate ( $\text{La}(\text{NO}_3)_3$ ), manganese (II) chloride ( $\text{MnCl}_2$ ), manganese (II) nitrate ( $\text{Mn}(\text{NO}_3)_2$ ), manganese (II) sulfate ( $\text{MnSO}_4$ ), iron (II) chloride ( $\text{FeCl}_2$ ), iron (II) nitrate ( $\text{Fe}(\text{NO}_3)_2$ ), iron (II) sulfate ( $\text{FeSO}_4$ ), iron (III) chloride ( $\text{FeCl}_3$ ), iron (III) nitrate ( $\text{Fe}(\text{NO}_3)_3$ ), iron (III) sulfate ( $\text{Fe}_2(\text{SO}_4)_3$ ), cobalt (II) chloride ( $\text{CoCl}_2$ ), cobalt (II) nitrate ( $\text{Co}(\text{NO}_3)_2$ ), cobalt (II) sulfate ( $\text{CoSO}_4$ ), cobalt (III) chloride ( $\text{CoCl}_3$ ), nickel chloride ( $\text{NiCl}_2$ ), nickel nitrate ( $\text{Ni}(\text{NO}_3)_2$ ), nickel sulfate ( $\text{NiSO}_4$ ), and combinations thereof.

12. The method of claim 1, wherein combinations of the at least one first compound and the at least one second compound are selected from the group consisting of I + V, II + V, III + V, IV + V, I + IV + V, I + VI, II + VI, III + VI, I + VII, II + VII, and III + VII, wherein
  - I) at least one of sodium hydroxide, sodium carbonate, sodium silicate, and/or sodium phosphate;
  - II) at least one of potassium hydroxide, potassium carbonate, potassium silicate, and/or potassium phosphate;
  - III) at least one of ammonium hydroxide, ammonium carbonate, ammonium silicate, and/or ammonium phosphate;
  - IV) at least one of sodium sulfate, potassium sulfate, and/or ammonium sulfate;
  - V) at least one of calcium chloride and/or calcium nitrate;
  - VI) at least one of magnesium chloride, magnesium nitrate, and/or magnesium sulfate;
  - and
  - VII) at least one of aluminum chloride, aluminum nitrate, and/or aluminum sulfate.
13. The method of claim 1, wherein the at least one first compound is at least one of a sodium salt or sodium hydroxide, and the at least one second compound is at least one of calcium chloride and/or calcium nitrate.